

MOTOR CONTROL CIRCUIT FOR SUPPLY- ING A CONTROLLABLE DRIVING VOLT- AGE

Abstract

For applying a driving voltage to a motor, an H-bridge circuit is constructed by a first and a second linear unit and a first and a second switching unit. An error amplifier generates an error signal representative of a difference between the driving voltage detected by a voltage detecting circuit and a command voltage signal. A state control circuit synchronously controls the first and second switching units and a feedback circuit. Through the feedback circuit, the error signal is selectively applied to the first or second linear unit such that one is operated in a linear mode and the other is operated in a nonconductive mode, thereby controlling the driving voltage to become proportional to the command voltage signal. The state control circuit further controls a brake circuit for transforming the error signal into a brake signal to operate the first and second linear units simultaneously in a conductive mode.